

LXVI.—*Descriptions of Three new Freshwater Fishes discovered by Mr. G. L. Bates in South Cameroon.* By G. A. BOULENGER, F.R.S.

Nannocharax ocellicauda.

Depth of body $4\frac{1}{2}$ to 5 times in total length, length of head 4 times. Head twice as long as broad, deeper than broad; snout rounded, feebly projecting, a little shorter than eye, which equals length of postorbital part of head and interorbital width. Gill-rakers short and few. Dorsal III 9–10, originating above root of ventrals, equally distant from eye and from root of caudal; longest ray about $\frac{3}{4}$ length of head. Anal III 9. Pectoral much shorter than head, not reaching root of ventral. Lobes of caudal acutely pointed. Caudal peduncle once and $\frac{1}{2}$ as long as deep. Scales $50\frac{6\frac{1}{2}}{8\frac{1}{2}}$, 5 between lateral line series and root of caudal; lateral line incomplete, reduced to a few tubercles. Yellowish in spirit, with a large black, light-edged ocellus at the root of the caudal fin; vertical fins greyish, dorsal black in front.

Total length 35 mm.

Two specimens from the Ja River.

This fish brings up to nine the number of species of *Nannocharax*. I have prepared the following synopsis for their distinction:—

1. Dorsal originating above ventrals, with 9 to 11 branched rays.

A. Lateral line complete.

1. Less than 50 scales in lateral line, $4\frac{1}{2}$ in transverse series above lateral line; length of head $3\frac{3}{4}$ to 4 times in total length.

Head not deeper than broad; depth of body $5\frac{1}{3}$ to $5\frac{1}{2}$ times in total length; pectoral as long as head, extending beyond root of ventral; Sq. 42–46 $\frac{4\frac{1}{2}}{7\frac{1}{2}}$. [(Gold Coast, Gaboon, Congo). 1. *N. fasciatus*, Gthr., 1867]

Head deeper than broad; depth of body $4\frac{1}{2}$ to 5 times in total length; pectoral as long as head, extending beyond root of ventral; Sq. 37–38 $\frac{4\frac{1}{2}}{6\frac{1}{2}}$. 2. *N. brevis*, Blgr., 1902 (Congo).

Head deeper than broad; depth of body $3\frac{3}{4}$ to $4\frac{1}{4}$ times in total length; pectoral much shorter than head, not reaching root of ventral; Sq. 38–40 $\frac{4\frac{1}{2}}{6\frac{1}{2}}$. 3. *N. parvus*, Pellegr., 1907 [(Ogowe).

2. 47 scales or more in lateral line, $5\frac{1}{2}$ in transverse series above lateral line; length of head 4 to 5 times in total length.

Head deeper than broad; depth of body

- 5 to $5\frac{1}{2}$ times in total length; pectoral as long as head or slightly shorter, reaching a little beyond origin of ventral; Sq. 47-55 $\frac{5\frac{1}{2}-6}{6\frac{1}{2}-7\frac{1}{2}}$ 4. *N. intermedius*, Blgr., 1903 [(Cameroon).
- Head not deeper than broad; depth of body 5 to 6 times in total length; pectoral shorter than head; Sq. 50-55 $\frac{5\frac{1}{2}}{7\frac{1}{2}}$ 5. *N. niloticus*, Joann., 1835 [(Nile).
- Head not deeper than broad; depth of body $6\frac{1}{2}$ to $7\frac{1}{2}$ times in total length; pectoral shorter than head; Sq. 52-57 $\frac{5\frac{1}{2}}{7\frac{1}{2}}$ 6. *N. elongatus*, Blgr., 1900 [(Congo).
- B. Lateral line incomplete, reduced to a few tubercles; Sq. 50 $\frac{6\frac{1}{2}}{8\frac{1}{2}}$; length of head 4 times in total length. 7. *N. ocellicauda*, Blgr., 1907 [(Cameroon).
- II. Dorsal originating well in advance of ventrals, with 11 or 12 branched rays; head deeper than broad, 4 to $4\frac{1}{3}$ times in total length; depth of body $4\frac{1}{2}$ to 5 times in total length; pectoral shorter than head.
- Sq. 48-49 $\frac{5\frac{1}{2}-6}{7\frac{1}{2}}$ 8. *N. tonia*, Blgr., 1902 (Congo)
- Sq. 52 $\frac{7\frac{1}{2}}{10\frac{1}{2}}$ 9. *N. dimidiatus*, Pellegr., 1904 [(Casamanza).

Barbus callipterus.

Depth of body 3 to $3\frac{1}{3}$ times in the total length, length of head $3\frac{1}{2}$ to $3\frac{2}{3}$ times. Snout rounded, not longer than eye, the diameter of which is $2\frac{2}{3}$ to 3 times in length of head and equals interorbital width; mouth terminal; lips moderately developed, interrupted on the chin; barbels two on each side, subequal, $\frac{2}{3}$ to $\frac{3}{4}$ diameter of eye. Dorsal III 8, last simple ray flexible, not enlarged, nearly as long as head; free edge of fin slightly concave; its distance from occiput less than its distance from caudal fin. Anal III 5, longest ray $\frac{3}{5}$ to $\frac{2}{3}$ length of head. Pectoral a little shorter than head, not reaching ventral; latter below anterior half of dorsal. Caudal peduncle about once and $\frac{1}{2}$ as long as deep. Scales 25-26 $\frac{3\frac{1}{2}}{3\frac{1}{2}}$, 2 between lateral line and ventral, 8 or 10 round caudal peduncle. Yellow, brownish on the back, the dorsal and lateral scales dark brown at the base; dorsal fin orange in the basal half, white in the distal half, with a large deep black spot between the last simple ray and the third branched ray; other fins white, the caudal orange at the base.

Total length 73 mm.

Four specimens from Akok, Kribi River.

Mastacembelus longicauda.

Depth of body 24 times in total length, length of head (without rostral appendage) 11 times. Vent much nearer end of snout than base of caudal fin. Length of head 4 times in its distance from vent and a little greater than its distance from first dorsal spine. Snout 4 times as long as eye, ending in a trifid appendage, which is not quite twice as long as eye; cleft of mouth extending to below anterior border of eye; no præorbital spine; two strong præopercular spines. Vertical fins united with the very short, broadly rounded caudal. Dorsal XXVII 150; last spine once and $\frac{1}{2}$ diameter of eye. Anal II 150*. Pectoral one fourth length of head. 14 series of scales between origin of soft dorsal and lateral line. Brown above, yellow beneath; a dorsal series of small dark brown spots; sides with lighter spots, some of which are ocellar; end of tail with large dark brown spots.

Total length 305 mm.

A single specimen from Akok, Kribi River.

Allied to *M. Greshoffi*, Blgr., from the Congo, but form more elongate, caudal fin more rounded, and no præorbital spine.

LXVII.—*Descriptions of Three new Fishes from Central Africa.* By G. A. BOULENGER, F.R.S.

Petersius Woosnami.

Depth of body equal to length of head, 4 times in total length. Head longer than deep, with convex upper profile; lower jaw projecting slightly beyond upper; diameter of eye equal to length of snout, 3 times in length of head; maxillary not extending to below anterior border of eye; 14 teeth ($\frac{6}{8}$) in the upper jaw, 8 in the lower; outer præmaxillary teeth tricuspid, inner multicuspid and inserted directly behind the outer. Gill-rakers short, 12 on lower part of anterior arch. Dorsal III 8, originating above base of ventrals and at equal distance from end of snout and from root of caudal; longest ray about $\frac{3}{4}$ length of head. Adipose fin very small. Anal III 17-18. Pectoral shorter than head, not reaching ventral.

* The numbers of soft rays are approximative, the vertical fins of the unique specimen being rather stiff, rendering the counting of the rays very difficult.